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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/766,678	01/27/2004	Younger Ahluwalia	03137.000007	3037

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FITZPATRICK CELLA HARPER & SCINTO
30 ROCKEFELLER PLAZA
NEW YORK, NY 10112

EXAMINER

RUDDOCK, ULA CORINNA

ART UNIT	PAPER NUMBER
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1794

MAIL DATE	DELIVERY MODE
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10/15/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/766,678	Applicant(s) AHLUWALIA ET AL.	
	Examiner Ula C. Ruddock	Art Unit 1794	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 September 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-17 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on April 17, 2007, has been entered.
2. The Examiner has carefully considered Applicant's response filed September 20, 2007. The rejection has been maintained.
3. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claim Rejections - 35 USC § 103

4. Claims 1-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ahluwalia (US 5,965,257) in view of Farrar (US 5,338,349) and Langer (US 4,600,634). Ahluwalia disclose a structural article used in a wide variety of products including fire walls, vapor barriers, roofing underlayment, and facing sheets (col 3, ln 34-42). The articles comprise a substrate having an ionic charge which is coated with a coating having essentially the same ionic charge. The coating consists of a filler material and a binder material. The binder comprises an acrylic latex, specifically Hycar 2679 (col 3, ln 5-9). It should be noted that Hycar 2679 polymer emulsion contains synthetic soap, sometimes known as surface active agents or surfactants (col 7, ln 16-19), thus meeting Applicant's limitation of a surfactant component. Furthermore, because a surfactant

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is present in Ahluwalia's composition, surfactant-generated microcells would also be present in the material. The substrate is preferably fiberglass and the filler is selected from fly ash, charged calcium carbonate, and ceramic microspheres. The binder is preferably acrylic latex (abstract) or SBR latex (col 3, ln 11-12). Ahluwalia further discloses that it is well known to include clay as a filler material in structural articles in the building industry (col 1, ln 12-26). The articles are planar in shape and the substrate is coated on one side or both sides depending on the intended application (col 3, ln 42-44). The structural material may be coated on one or both sides with a water repellent material, an algaecide, an antifungal material, an antibacterial material, a surface friction agent, a flame retardant material, and a coloring dye (col 3, ln 54-67 to col 4, ln 1-3). The structural article contains 10-25% by weight glass fibers (claim 13) and the coating comprises nearly 85% by weight of the article (col 3, ln 17-18). Ahluwalia discloses the claimed invention except for the teaching of a gel catalyst component and that a metallic component is adhered to the coated substrate on one or both sides of the substrate.

Farrar (US 5,338,349) discloses a fire resistant and high temperature insulating composition. The composition comprises a binder and a gelling agent. The composition can be used as a coating composition (abstract). The composition can be coated onto articles made of glass and onto fabrics (col 2, ln 31-34). Other components of the composition include dyes and fungicides (col 2, ln 26-28). The binder used in the composition can be polyvinyl alcohol, which is a type of binder described in Applicant's specification at paragraph [0019]. The gelling agent is capable of absorbing water and expanding in size to provide a degree of elasticity to the moist

composition (col 5, ln 26-29). It should be noted that the gelling agent of Farrar is being equated to the gel catalyst of the present invention.

Langer (US 4,600,634) discloses flexible fibrous endothermic sheet materials for fire protection. The flexible sheet is made of fiberglass and acrylic binder and is useful in building construction (abstract). Fillers useful in the composition include alumina trihydrate (col 3, ln 59). A backing, comprising an aluminum foil, is added to the backing of the sheet material to give an added degree of strength to the sheet material (col 4, ln 8-10).

It would have been obvious to have used Farrar's gelling agent in the composition of Ahluwalia and Langer, motivated by the desire to create a composition that has some degree of elasticity and to improve the fire resistance of the coated material.

It also would have been obvious to one having ordinary skill in the art to have added Langer's aluminum sheet to one or both sides of the coated substrate of Ahluwalia and Farrar, motivated by the desire to create a structural article with increased strength and durability.

Rejection is maintained.

Response to Arguments

5. Applicant's arguments filed September 20, 2007, have been fully considered but they are not persuasive for the reasons set forth. Applicant argues that the Ahluwalia reference is not prior art under 35 U.S.C. 103 (a) because the subject matter which is the basis for the rejection is not the invention of "another." This argument is not persuasive because the Ahluwalia '257 reference can still be considered as prior art under 102(a) and/or 102(e). The cited reference is still considered an invention of another, unless Applicant amends the inventorship of this current

Application to have Mr. Ahluwalia be the sole inventor. Applicant also argues that the combination of Ahluwalia and Langer do not support a prima facie case of obviousness because Ahluwalia provides no teaching of surfactant-generated microcells despite the teaching of Hycar 2679. It should be noted that Hycar 2679 polymer emulsion contains synthetic soap, sometimes known as surface active agents or surfactants (col 7, In 16-19), thus meeting Applicant's limitation of a surfactant component. Furthermore, because a surfactant is present in Ahluwalia's composition, surfactant-generated microcells would also be present in the material. Applicant argues that the Ahluwalia reference teaches away from surfactant generated microcells because Ahluwalia discloses the use of defoaming agents. This argument is not persuasive because the present invention, at paragraph [0054] of the specification, also discloses the use of defoaming agents. Therefore, the Examiner maintains the position that the use of Hycar 2679, as shown by Ahluwalia, would generate microcells despite the use of defoaming agents. Applicant also argues that the Ahluwalia reference teaches away from surfactant generated microcells because Ahluwalia discloses the use of defoaming agents. This argument is not persuasive because the present invention, at paragraph [0058] of the specification, also discloses the use of a defoamer. Therefore, the Examiner maintains the position that the use of Hycar 2679, as shown by Ahluwalia, would generate microcells despite the use of defoaming agents. This reasoning is based upon the fact that Applicant's present invention discloses surfactant generated microcells despite the use of a defoamer. Applicant further argues that Farrar's gelling agent is not a gel catalyst. This argument is not persuasive because it is the Examiner's position that the gelling agent of Farrar will accelerate, to a certain extent, gel formation. Because Applicant's specification and claims fail to

specify a time period in which the gel is formed, the gelling agent of Farrar can properly be equated to Applicant's gel catalyst. Furthermore, Applicant's arguments regarding Farrar's gelling agent are not commensurate in scope with the present claims, because the present claims do not specify how the gelling agent catalyzes gel formation. Finally, Applicant also argues that a skilled artisan would not be motivated to combine the teachings of Ahluwalia and Langer. This argument is not persuasive because Langer specifically discloses that adding an aluminum foil layer gives an added degree of strength to the sheet material. As a result, motivation exists to combine the references. Therefore, the rejection is maintained.

Conclusion

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ula C. Ruddock whose telephone number is 571-272-1481. The examiner can normally be reached on Monday-Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terrel H. Morris can be reached on 571-272-1478. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/U. C. R./

/Ula C Ruddock/
Primary Examiner, Art Unit 1794